

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
6 May 2004 (06.05.2004)

PCT

(10) International Publication Number  
WO 2004/038423 A3

(51) International Patent Classification<sup>7</sup>: G01N 33/48, 33/52, 27/447

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(21) International Application Number:

PCT/US2003/033819

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(30) Priority Data:

60/421,021 23 October 2002 (23.10.2002) US

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(63) Related by continuation (CON) or continuation-in-part (CIP) to earlier application:

US 60/421,021 (CON)  
Filed on 23 October 2002 (23.10.2002)

## Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

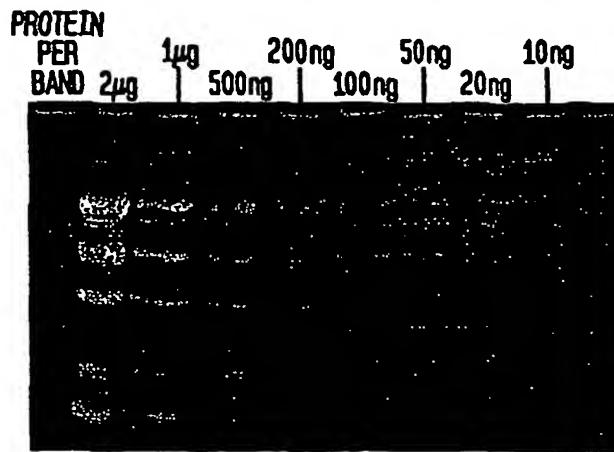
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(88) Date of publication of the international search report: 10 June 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: IN-GEL FLUORESCENT PROTEIN STAINING TECHNIQUE



(57) Abstract: An "in-gel" staining technique for detecting and/or separating proteins during electrophoresis, illustratively as a modification of the standard Laemmli procedure. A fluorescent dye, such as Nile red or Phosphine, is included in the running buffer (mobile phase) which may be a standard Laemmli Tris-Glycine SDS buffer that has been modified to reduce the concentration of detergent (SDS) to less than the typical concentration (0.10% v/v). The fluorescent dye stains proteins during electrophoretic separation. The post-electrophoretic operations are, therefore, reduced and the separated, stained fractions are recoverable for further processing, purifying or analysis.

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# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US 03/33819

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 G01N33/48 G01N33/52 G01N27/447

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, PAJ, EPO-Internal, COMPENDEX, EMBASE, MEDLINE, BIOSIS, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 616 502 A (SINGER VICTORIA L ET AL) 1 April 1997 (1997-04-01) page 1, line 23-32 column 2, line 1-15 column 18, line 55 -column 19, line 13 column 21, line 3-18 column 21, line 64 -column 22, line 15 column 22, line 39 -column 24, line 24 examples 1,13 ---	1-20
P,X	US 6 579 718 B1 (CHEUNG CHING-YING ET AL) 17 June 2003 (2003-06-17) column 7, line 42 -column 9, line 67 column 11, line 45 -column 12, line 20 column 12, line 48-53 column 14, line 4-17 example 30 --- -/-	1-20

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Patent family members are listed in annex.

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Date of the actual completion of the International search

16 April 2004

Date of mailing of the International search report

28/04/2004

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International Application No  
PCT/US 03/33819

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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A	ALBA F JAVIER ET AL: "Detection of five nanograms of protein by two-minute Nile red staining of unfixed SDS gels" BIOTECHNIQUES, EATON PUBLISHING, NATICK, US, vol. 21, no. 4, 1996, pages 625-626, XP002181429 ISSN: 0736-6205 page 625 ----	1-20
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A	ALBA, JF; ET AL.: "Rapid fluorescent monitoring of total protein patterns on sodium dodecyl sulfate-polyacrylamide gels and Western blots before immunodetection and sequencing " ELECTROPHORESIS, vol. 19, no. 14, October 1998 (1998-10), pages 2407-2411, XP009029459 Weinheim abstract page 2407 -page 2408, right-hand column ----	1-20

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